

I CLAIM AS MY INVENTION:

1. An interface unit for use with an electrophysiology measurement system

having an electrophysiology monitoring system and a plurality of catheter-mounted
~~sensors~~ ^{Sensor electrical} ~~male~~ ^{TO} ~~male~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
sensors respectively connected to ~~male~~ ^{unit} ~~male~~ ^{TO} ~~male~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
a plurality of externally accessible ~~female~~ ^{unit} ~~female~~ ^{TO} ~~female~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
a one of ^{unit} ~~female~~ ^{TO} ~~female~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
adapted for releasably mating with said ~~male~~ ^{unit} ~~male~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
an arrangement for producing predetermined interconnections among said
~~unit~~ ^{unit} ~~female~~ ^{TO} ~~female~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
said arrangement adapted for communicating with
²⁰⁰¹⁻⁰⁴⁻¹⁷ ~~unit~~ ^{unit} ~~female~~ ^{TO} ~~female~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
said electrophysiology monitoring system; and

a signal generator connected to said arrangement which emits an output signal,

adapted to be received by said electrophysiology monitoring system via
said arrangement, containing information unique to and originating from
said interface unit, for use by said electrophysiology monitoring system.

2. An interface unit as claimed in claim 1 further comprising a housing, and

wherein said signal generator emits said output signal containing information unique to
said housing.

3. An interface unit as claimed in claim 2 wherein said signal generator

comprises a read-only memory containing said information unique to said housing.

unit electrical

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4. An interface unit as claimed in claim 1 wherein said ~~female~~ connectors are disposed at an outer surface, and wherein said interface unit further comprises at least one label layer placeable over said outer surface and carrying visible indications of said interconnections, and wherein said signal generator emits said output signal containing information unique to said label layer.

5. An interface unit as claimed in claim 4 wherein said label layer is removably placeable on said outer surface.

6. An interface unit as claimed in claim 5 wherein said label layer is permanently fixed at said outer surface.

7. An interface unit as claimed in claim 4 wherein said signal generator comprises an element placeable on said outer surface together with said label layer and containing machine-readable information unique to said label layer and a reader arrangement for reading said machine-readable information from said element for generating said output signal.

8. An interface unit as claimed in claim 1 wherein said signal generator generates said output signal containing a protocol for a ~~male/female~~ mating configuration among said ~~male~~ and ~~female~~ connectors.

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9. An interface unit as claimed in claim 1 wherein said signal generator emits said output signal containing at least a portion of said electrophysiology examination set-up protocol.

10. An electrophysiology measurement system comprising:

a plurality of catheter-mounted sensors respectively having ~~male~~ connectors
associated therewith; 2001-04-17

a monitoring system for analyzing signals from said sensors; and
at least one interface unit connected between said sensors and said monitoring system, said interface unit having a plurality of ~~female~~ connectors 2001-04-17
respectively receiving said ~~male~~ connectors and containing an arrangement defining interconnections among said ~~female~~ connectors, 2001-04-17
said arrangement being in communication with said monitoring system,
and said interface unit further having a signal generator connected to said arrangement for generating an output signal unique to and originating from the interface unit supplied to the monitoring system via said arrangement, said output signal modifying operation of said monitoring system dependent on said information.

11. An electrophysiology measurement system as claimed in claim 10 wherein said ~~female~~ connectors are disposed at an outer surface of said interface unit, and wherein said interface unit has a label layer, removably placeable on said outer surface, carrying permanently fixed visible indications of different ~~inter~~ connector configurations and a human readable label identification code, a housing having a human

readable housing identification code, and wherein said signal generator generates said output signal unique to said housing, and wherein said monitoring system has a data presentation device and a processor with label layer identification codes stored therein for predetermined electrophysiology examinations, said processor modifying operation of said monitoring system to present a layer identification code and a housing identification code protocol on said presentation device for a selected one of said examinations.

12. An electrophysiology measurement system as claimed in claim 10 wherein
unit ~~female~~ ²⁰⁰¹⁻⁰⁴⁻¹⁷
said ~~female~~ connectors are disposed on an outer surface of said interface unit, and
wherein said interface unit further has a label layer, removably placeable on said outer
surface and wherein said signal generator generates said output signal unique to said
label layer, and wherein said electrophysiology monitoring system has a processor with
an indication of at least one label layer stored therein for each of a number of different
predetermined electrophysiology examinations, and wherein said processor compares
the label layer identified in said output signal with an indication for a selected
electrophysiology study, and modifies operation of said monitoring system dependent
on a result of the comparison.

13. An electrophysiology measurement system as claimed in claim 10 wherein
said signal generator generates an output signal containing at least a portion of an
electrophysiology examination set-up protocol, and wherein said monitoring system has
a processor which receives said set-up protocol and modifies operation of said
monitoring system in accordance with said protocol.

14. An electrophysiology measurement system as claimed in claim 13 wherein said monitoring system comprises a signal switching unit having switch settings controllable by said processor, and wherein said set-up protocol contains information for use by said processor to vary said switch settings dependent on said examination.

15. An electrophysiology measurement system as claimed in claim 13 wherein said set-up protocol contains information for use by said processor for varying at least one of a presentation format and a type of study data recorded by said monitoring system.

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